

In the Claims:

1. (Currently amended) A muffler, for an internal combustion engine,

the muffler comprising a housing (2) through which is adapted to have a gaseous medium flows flow therethrough and which has at least one housing chamber (3, 5), and

the muffler further comprising deflecting elements (13 to 16) that serve are adapted and arranged to make the gaseous medium swirl and that are arranged in a fixed manner spaced apart one behind another in the housing chamber along a main axis (19') of the housing, so that the deflecting elements are fixed stationary relative to the housing.

wherein each one of the deflecting elements respectively comprises a disk-shaped body (17') having a set of radially extending guiding elements (18) being guide vanes as well as radially extending slots (18') respectively between the guide vanes, and extends over the clear cross section of the housing (2),

wherein each one of the guide vanes has a free leading edge along one of the slots and a free trailing edge along another of the slots,

wherein each one of the slots is respectively formed and bounded between the trailing edge of one of the guide vanes and the leading edge of a next adjacent one of the guide vanes of a respective one of the deflecting elements, and

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27 wherein the respective sets of guide vanes of
28 successive adjacent ones of the deflecting elements along
29 the main axis of the housing are respectively alternately
30 oppositely angled at opposite pitch angles so as to
31 be adapted to deflect the flow of the gaseous medium
32 respectively alternately in opposite swirl directions about
33 the main axis (19') of the housing respectively in
34 successive portions of the housing chamber respectively
35 between successive ones of the deflecting elements.

2. (Canceled).

1 3. (Original) The muffler as claimed in claim 1, wherein the
2 disk-shaped bodies (17') are in each case slotted
3 rectilinearly.

1 4. (Original) The muffler as claimed in claim 1, wherein all
2 of the guiding elements (18) of a disk-shaped body (17')
3 are angled in the same direction.

1 5. (Previously presented) The muffler as claimed in claim 1,
2 wherein the pitch angle (α) of the guiding elements (18) is
3 alternately positive and negative respectively on
4 successive ones of the deflecting elements.

1 6. (Previously presented) The muffler as claimed in claim 1,
2 wherein radially outer ends of the guiding elements (18)
3 which are arranged at a distance from the main axis (19')

4 of the housing are more sharply angled than radially inner
5 ends of the guiding elements which are situated near the
6 main axis (19') of the housing.

1 7. (Original) The muffler as claimed in claim 1, wherein the
2 guiding elements (18) are at least partially twisted in
3 themselves.

1 8. (Original) The muffler as claimed in claim 1, wherein the
2 disk-shaped body (17') as a blank is in the form of a
3 circular ring.

1 9. (Previously presented) The muffler as claimed in claim 1,
2 wherein the guiding elements (18) are each respectively in
3 the form of a sector of a circular ring.

1 10. (Previously presented) The muffler as claimed in claim 1,
2 wherein the deflecting elements (13 to 16) are arranged
3 with their guiding elements (18) between housing chamber
4 parts which do not contain deflecting elements.

1 11. (Previously presented) The muffler as claimed in claim 1,
2 wherein each of the deflecting elements (13 to 16)
3 respectively forms a respective muffler stage.

1 12. (Previously presented) The muffler as claimed in claim 1,
2 comprising the arrangement of at least three of the

3 deflecting elements (13 to 16) each forming a muffler
4 stage.

1 13. (Previously presented) The muffler as claimed in claim 1,
2 wherein each deflecting element has approximately 10 to 40
3 guiding elements (18) which are each in the form of a
4 sector of a circular ring in layout.

1 14. (Previously presented) The muffler as claimed in claim 1,
2 wherein the deflecting elements (13 to 16) each integrally
3 have a hub part (17) with the slots (18') extending
4 radially outwardly therefrom and with the guide vanes
5 extending integrally radially outwardly therefrom.

1 15. (Original) The muffler as claimed in claim 1, wherein the
2 deflecting elements (13 to 16) are in each case arranged on
3 a supporting pipe (11) which conducts the gaseous medium.

1 16. (Previously presented) The muffler as claimed in claim 1,
2 wherein the deflecting elements (13 to 16) are manufactured
3 in each case as disk-shaped bodies (17') from flat
4 sheet-metal rings forming disk blanks in which the slots
5 are formed as narrow slots (18') which extend radially and
6 rectilinearly from the outside to the inside.

17. (Canceled).

1 18. (Previously presented) The muffler as claimed in claim 1,
2 wherein the pitch angles of successive ones of the
3 deflecting elements which are inclined in opposite
4 directions have the same absolute angular value.

1 19. (Currently amended) The muffler as claimed in claim 1,
2 wherein the deflecting elements (13 to 16) are arranged
3 with a hub part (17) on a supporting element ~~[[11]]~~ (11)
4 arranged centrally in the housing (2).

1 20. (Previously presented) The muffler as claimed in claim 1;
2 wherein an axial length of the housing (2) or at least of
3 a housing part (3, 5) is dimensioned in such a manner that
4 a number of deflecting elements (13 to 16) adapted to a
5 particular application can be fitted therein.

1 21. (Previously presented) A combination comprising the muffler
2 as claimed in claim 1 connected to an internal combustion
3 engine of a model aircraft.

22. (Canceled).

1 23. (Previously presented) The muffler as claimed in claim 1,
2 wherein each one of the deflecting elements further
3 includes a hub from which the guide vanes extend radially
4 outwardly, and wherein the guide vanes are connected to the
5 hub only at respective radially inner root ends of the

6 guide vanes and are otherwise not connected to one another
7 in the respective deflecting element.

1 24. (Previously presented) The muffler as claimed in claim 1,
2 wherein at least a portion of the housing chamber is a
3 gaseous medium calming section that is hollow and
4 unoccupied by the deflecting elements.

1 25. (New) An exhaust gas muffler for muffling exhaust gas of an
2 internal combustion engine, said muffler comprising:

3 a cylindrical housing that extends along an axis and
4 that surrounds a muffler chamber therein;

5 a gas inlet pipe that has a gas inlet port and a gas
6 introduction opening respectively at opposite ends thereof,
7 and that extends from said gas inlet port along said axis
8 through a first end of said housing into said muffler
9 chamber toward a second end of said housing so that said
10 gas introduction opening communicates into said muffler
11 chamber;

12 a gas outlet that communicates out of said muffler
13 chamber through said housing relatively proximate to said
14 first end and distal from said second end of said housing;
15 and

16 a plurality of deflecting disks that are arranged
17 spaced apart from one another successively along said axis
18 and are each non-rotatably fixed to said gas inlet pipe so
19 that said deflecting disks are stationary relative to said
20 housing;

21 wherein:

22 each one of said deflecting disks respectively
23 comprises a central hub through which said gas inlet pipe
24 extends and which is non-rotatably fixed to said gas inlet
25 pipe;

26 each one of said deflecting disks respectively further
27 comprises a respective set of plural guide vanes extending
28 radially outwardly from said central hub, with open slots
29 extending radially outwardly from said central hub
30 respectively between a free trailing edge of a respective
31 one of said guide vanes and a free leading edge of a next
32 adjacent one of said guide vanes;

33 said respective sets of guide vanes of successive
34 adjacent ones of said deflecting disks along said axis are
35 respectively alternately oppositely angled at opposite
36 pitch angles about radially extending lines so as to be
37 adapted to deflect a flow of exhaust gas alternately in
38 opposite swirl directions about said axis between
39 successive ones of said deflecting disks along said axis in
40 a direction from said second end toward said first end of
41 said housing.

1 26. (New) The exhaust gas muffler according to claim 25,
2 wherein each one of said slots is respectively a
3 rectilinear slot formed by a single straight-line cut
4 separating said trailing edge of a respective one of said
5 guide vanes from said leading edge of a next adjacent one
6 of said guide vanes.